

REMARKS

This Amendment is prepared in response to the first Office action mailed on 13 July 2005 (Paper No. 070905). Upon entry of this amendment, claims 1, 3-5 and 7-24 will be pending. Applicant is canceling claims 2 and 6 without prejudice or disclaimer as to their subject matter, amending claims 1, 7, 8 and 17 and newly adding claims 21 through 24 by this amendment.

In Paper No. 070905, the Examiner objected to claims 7 and 8. Applicant has amended claims 7 and 8 by this amendment to overcome these claim objections.

In Paper No. 070905, the Examiner rejected claims 1, 2, 5, 6, 8, 9, 11 and 20 under 35 U.S.C. 102 (b) as being anticipated by USP 6,008,582 to Asano. Applicant has the following comments:

Regarding claim 6, Applicant's claim 6 claims "a phosphor layer is further coated on an outer circumference of the dielectric material coating the address electrodes". In Paper No. 070905, the Examiner states that this feature is taught by FIG. 1 and col 4, lines 43 and 44 of Asano '582. Applicant disagrees.

Applicant submits that there is no teaching or suggestion in Asano of a phosphor layer coated on an "outer circumference" of the dielectric material coating the address electrodes.

This is because “circumference” is defined as a line bounding a rounded, circular or elliptical area or a perimeter thereto. Applicant submits that there is no teaching of the address electrodes, and a dielectric layer for the address electrodes being circular, round or elliptical in Asano. Applicant submits that Asano teaches a flat address electrode with the possibility of a dielectric layer covering the flat or rectangular address electrode. Asano is devoid of any teaching of a rounded address electrode, and is devoid of a dielectric layer coating the address electrode being round. As a result, Asano can not possibly teach Applicant’s claim 6. Applicant has amended claim 1 by this amendment to include the subject matter of former claim 6 and intervening claim 2 into claim 1.

Regarding claim 11, Applicant claims, “the discharge cells ... are rectangular and staggered to discharge cells on an opposite side of a first barrier rib.” In Paper No. 070905, the Examiner states that this limitation is taught by FIGS. 4 and 5 in view of FIG. 1 of Asano. Applicant disagrees.

Applicant submits that “staggered” is defined as to set, arrange, or incline alternately, as on either side of a line; make zigzag or alternating. Applicant submits that there is no such comparable feature in Asano. In FIG. 1 of Asano, discharge spaces 2 are arranged in stripes, so that there is no staggering. In both of FIGS. 4 and 5, the discharge spaces 2 are lined up with each other on each side of the barrier rib 1b. Since the discharge spaces 2 are lined up in FIGS. 4 and 5 of Asano, they cannot be considered to be staggered or arranged

alternately on either side of the barrier rib 1b. Further, Applicant cannot find any other teaching of staggering discharge cells in Asano. Therefore, Applicant submits that Asano cannot possibly teach or suggest Applicant's claim 11. Therefore, the rejection must be withdrawn.

In Paper No. 070905, the Examiner rejected claims 1, 12, 14, 17 and 19 under 35 U.S.C. 102 (e) as being anticipated by USP 6,670,757 to Kato et al. The Examiner relies essentially on FIG. 7 of Kato and on col 11, lines 28-35 of Kato in his rejection. FIG. 7 of Kato shows barrier ribs 21 in parallel with protrusions 23, where barrier ribs 21 are formed to be taller than protrusions 23. Address electrodes 31 are formed on top of protrusions 23 and then an overcoating layer 24 is formed on top of the protrusions 23.

In Paper No. 070509, the Examiner equates barrier ribs 21 of Kato with Applicant's first barrier ribs, and protrusions 23 of Kato with Applicant's second barrier ribs. However, the Examiner recognizes that FIG. 7 of Kato does not teach the protrusions 23 running orthogonal to the barrier ribs 21. To make up for this deficiency, the Examiner turns to col 11, lines 28-35 of Kato, which describes a possible variant of FIG. 7 of Kato. The Examiner then states that the combined teachings of col 11, lines 28-35 of Kato and FIG. 7 of Kato teach every feature of Applicant's claim 12. Applicant disagrees.

Col 11, lines 28-35 of Kato state, "Although the barrier ribs 21 are formed in a striped

pattern in the PDP of the present exemplary embodiment, the protrusion 23 and the address electrode 31 can be formed in a lattice pattern. In other words, the protrusions 23 and the address electrodes 31 may be formed in two directions, one being generally in parallel with the barrier ribs 21, and the other being generally in parallel with the scan electrode 41 as well as the sustain electrode 42, so that the address electrodes 31 are formed in such structure that they are separated by the barrier ribs 21.” From this, the Examiner deduces that FIG. 7 of Kato, as modified by this passage of Kato, teaches the second barrier ribs being orthogonal to the first barrier ribs and the address electrodes being orthogonal to the display electrodes. Applicant disagrees.

Applicant submits that col 11, lines 28-35 of Kato teaches that both the protrusions 23 and the address electrodes 31 can be formed in a lattice pattern, extending in two directions. This is not what Applicant is claiming. In claim 12, Applicant claims “the address electrodes being orthogonal to the display electrodes” and the second barrier ribs being orthogonal to the first barrier ribs. Applicant submits that FIG. 7 as modified according to col 11, lines 28-35 of Kato, would not result in this. This is because FIG. 7 of Kato, as modified by col 11, lines 28-35 of Kato, would have both the protrusions 23 and the address electrodes 31 both extending in both directions parallel to and orthogonal to the display electrodes. Applicant is not claiming that the address electrodes extend in both directions. Applicant is claiming in claim 12 that the address electrodes extend orthogonal to the display electrodes. Also, Applicant is claiming that the second barrier ribs are formed

in a direction orthogonal to the display electrodes, not formed both parallel to and orthogonal to the display electrodes. For this reason, Applicant submits that FIG. 7 of Kato, as modified according to col 11, lines 28-35 of Kato, cannot each Applicant's claim 12. Therefore, the rejection to claim 12 must be withdrawn.

Regarding claims 10 and 18, these claims claim that the address electrodes have a circular cross section. In Paper No. 070905, the Examiner rejected these claims under 35 U.S.C. 103 (a) using Asano and Kato respectively. In Paper No. 070905, the Examiner admits that both Asano and Kato fail to teach address electrodes having circular cross sections, but that such a modification would involve a mere change in the shape of the component and is thus not a patentable difference. Applicant objects. The Examiner further states in Paper No. 070905 that USP 6,495,967 to Kao, USP 6,608,441 to Kunii and USP 6,459,200 to Moore teach a circular cross-sectioned electrode. Applicant again objects.

Applicant submits that it is more than a mere design choice to use an address electrode having a circular cross section in the design of a plasma display panel. Unlike any of the prior art references (and the Examiner admits this in Paper No. 070905), Applicant attaches the address electrode to the fixing groove on the substrate, as opposed to forming the address electrodes via a printing or deposition technique. This is because Asano and Kato teach forming the address electrode through a screen printing or deposition technique, and when such a technique is used, a circular cross-sectioned electrode is not apt to result. In

contradistinction, Applicant attaches a prefabricated address electrode, possibly coated with a dielectric and a phosphor, to the rear substrate at a fixing groove. Applicant submits that since most pre assembled wires are circular when not formed by a printing or a deposition process, Applicant claimed a circular wire. Applicant submits that the prior art is lacking a similar manufacturing process and a similar thought process as to why to use a circular wire. Instead, the prior art uses deposition or screen printing to form their electrode, which shows a lack of appreciation for Applicant's invention by disregarding how Applicant's invention is made and why Applicant has circular address electrodes. For this reason, Applicant objects to the 35 U.S.C. 103 rejections to claims 10 and 18 and demands their withdrawal.

Applicant has newly added claims 21-24 and amended claim 17 by this amendment to further emphasize Applicant's novel features over the applied prior art. These claims claim that the address electrodes are completely surrounded by the dielectric and phosphor materials, that the address electrodes are mounted on the second barrier ribs, that the address electrodes are orthogonal to the second barrier ribs, and that the address electrodes are orthogonal to the display electrodes. Entry of and favorable examination of these claims is respectfully requested.

A fee of \$100 is incurred by the addition of two (2) claims in excess of 20. Applicant's check drawn to the order of Commissioner accompanies this Response. Should

the check become lost, be deficient in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

In view of the above, it is submitted that all of the claims now present in the application are patentable over the cited references, taken either alone or combination and accordingly should now be in a conditions suitable for allowance.

No other issues remaining, reconsideration and favorable action upon all of the claims now present in the application is respectfully requested.

Respectfully submitted,



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Date: 10/12/05
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